Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

- 1. (Currently Amended) A conjugate for gene transfer, eomprising consisting essentially of an oligonucleotide intended to be transferred into a target cell and a hydrophilic polymer, wherein an end of the oligonucleotide is covalently linked to the hydrophilic polymer via an acid cleavable linkage which is an acetal bond.
- 2. (Previously Presented) The conjugate as set forth in claim 1, wherein the hydrophilic polymer is selected from non-ionic polymers having a molecular weight of over 500 daltons.
- 3. (Original) The conjugate as set forth in claim 1, wherein the oligonucleotide has a molecular weight ranging from 1,000 to 50,000 daltons.
- 4. (Original) The conjugate as set forth in claim 1, wherein the hydrophilic polymer is one or more selected from the group consisting of polyethylene glycol, polyvinylpyrrolidone and polyoxazoline.
- 5. (Canceled)
- 6. (Previously Presented) The conjugate as set forth in claim 1, wherein monomers of the oligonucleotide are linearly linked via a phosphodiester bond.

- 7. (Previously Presented) The conjugate as set forth in claim 1, wherein the oligonucleotide is an antisense oligonucleotide.
- 8. (Previously Presented) The conjugate as set forth in claim 7, wherein the antisense oligonucleotide comprises a nucleotide sequence complementary to a portion or entire nucleotide sequence of c-myc gene.
- 9. (Previously Presented) The conjugate as set forth in claim 1, wherein the conjugate is synthesized by the steps comprising activating an end of an oligonucleotide, and covalently linking a biodegradable hydrophilic polymer to the end of the oligonucleotide.
- 10. (Previously Presented) The conjugate as set forth in claim 9, wherein a chemical compound activating a functional group at the end of the oligonucleotide is selected from 1-ethyl-3,3-dimethylaminopropyl carbodiimide (EDAC), imidazole, N-hydrosuccinimide (NHS) and dicyclohexylcarbodiimide (DCC), HOBt (1-hydroxybezotriazole), ρ-nitrophenylchloroformate, carbonyldiimidazole (CDI), and N,N'-disuccinimidylcarbonate (DSC).
- 11. (Withdrawn) A polyelectrolyte complex micelle formed from the conjugate for gene transfer of any one of claims 1 to 8 and a cationic polymer or cationic peptide, wherein formation of the micelle is driven by ionic interaction.

- 12. (Withdrawn) The polyelectrolyte complex micelle as set forth in claim 11, wherein cationic peptide is KALA or protamine.
- 13. (Withdrawn) The polyelectrolyte complex micelle as set forth in claim 11, wherein cationic polymer is one or more selected from polyethylenimine, polyamidoamine, polylysine, diethylaminoethyldextran, polydimethylamino-ethyl methylacrylate, and derivates thereof.
- 14. (Withdrawn) A method of preparing a polyelectrolyte complex micelle, comprising inducing ionic interaction between the conjugate for gene transfer of any one of claims 1 to 8 and a cationic polymer or cationic peptide.